PLANNING AND ACCOMPLISHMENT NARRATIVE - FY 1973

Malheur National Wildlife Refuge
P. O. Box 113
Burns, Oregon 97720

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.PERSONNEL

Joseph P. Mazzoni	Refuge Manager
Walter L. Anderson (LWOP 6/4/72)	Wildlife Biologist (Management)
Noel L. Cagle	Maintenance Foreman
Ivan J. Carey	Management Assistant
Robert A. Carlson (Trans. to FEC 5/12/73)	Maintenanceman
Quentin L. Currey	Maintenanceman
Jack A. Dalton (Retired 10/20/72)	Maintenanceman
Jeffrey W. Fleischer (E.O.D. 2/18/73)	Refuge Manager
Sean B. Furniss (Resigned 9/9/72)	Refuge Manager
Irma G. Gail	Clerk-Stenographer
Richard B. Gritman (E.O.D. 3/4/73)	Refuge Manager
Kenneth W. Hite	Maintenanceman
Marvin L. Jess	Dragline Operator
Eldon L. McLaury	Wildlife Biologist (Management
Alfred L. Radtke (E.O.D. 2/18/73)	Refuge Manager
Elmer D. Reynolds	Engineering Equipment Mechanic
Richard E. Toltzmann (Trans. 9/30/72)	Refuge Manager
Norman J. Warneke	Maintenanceman

TEMPORARY PERSONNEL

James B. Doherty	Maintenanceman
Frederick R. Fivecoat	Maintenanceman
Christine M. Gniewosz	Biological Aid
Robert C. Johnson	Maintenanceman
Thurman L. Kennedy	Summer Aid
Leslie L. Lafferty	Summer Aid
Guy W. Leslie	Maintenanceman
Carroll D. Littlefield	Biological Aid
Cheryl L. McKenzie	Summer Aid
Richard R. Sjostrom	Biological Technician (Wildlife)
W. Ruth Warneke	Clerk-Typist
Tye O. West	Summer Aid
Cheryl R. Williams	Conservation Aid

APPROVED, REGIONAL OFFICE

Robert J. [illegible]
Signature

Asst Refuge Supervisor
Title

3/11/74
Date

Submitted By:

[illegible]
Signature

[illegible]
Title

March 8, 1974
Date

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I. REFUGE HIGHLIGHT STATEMENT - F.Y. 1973

In spite of below average rainfall and a prolonged period of cool temperatures during the late spring and early summer months of 1972, above normal runoff was experienced in all three refuge watersheds from the excellent 1971/72 snowpacks. A near maximum acreage of breeding bird habitat was irrigated and/or flooded in the Blitzen Valley and Double O Units, as well as in Malheur Lake. Fair residual cover adjacent to water areas was available for early nesting waterfowl and waterbirds. A luxuriant stand of current vegetative growth provided excellent cover for late nesting species. Malheur Lake receded to approximately 48,000 surface acres (about 24,000 acres each of open water and marsh) by August 1, 1972, with an estimated 6,000 acres of sago pondweed in open water areas. This compared to about 15,600 acres in the summer of 1971, and 10,000 acres in the summer of 1970.

The burgeoning carp population provided an excellent food source for all fish-eating species, but caused a marked reduction in sago production in the summer of 1972, and the virtual elimination of sago from the marsh by the end of the reporting period.

The accidental introduction of carp to the Silvies River by the Oregon State Game Commission in the early 1920's has developed into one of the most serious problems the refuge faces. Carp now occur in startling numbers throughout the lower portion of the Harney Basin watershed and in all refuge waters. During periods of high population levels, such as we are now experiencing, they are responsible for a major reduction in the biological productivity of the Malheur Lake marsh and other Basin aquatic habitats. This has a major bearing on fall waterfowl maintenance levels, and undoubtedly, an indirect bearing on waterfowl production levels, particularly on Malheur Lake. We badly need an economically feasible method of managing carp under our conditions.

Malheur Lake receded to approximately 40,000 surface acres by October 1, drying the open water areas east of the Pelican Islands and many other areas that contained a fair stand of sago pondweed. Consequently, only limited aquatic food supplies were available for migrating shorebirds on the mudflats exposed by receding lake levels.

Grain fields at Knox Pond and Buena Vista were major attractions to waterfowl and sandhill cranes, but were 90 percent or more utilized by November 15. Boca Lake, with 450 surface acres of water flooding the extensive smartweed stand located in the western portion of this unit, was one of the more attractive areas to birds in the Blitzen Valley. Fall-flooded meadows in the Double O provided excellent feeding and resting areas for migrants.

Record low temperatures in December took a heavy toll of upland game, particularly California valley quail, in spite of excellent winter cover in most units. With grain fields fed out, and open water virtually non-existent, a majority of the waterfowl departed the Basin.

Although a near average snowpack developed during the 1972/73 winter period, projected 1973 streamflows failed to materialize, due largely to climatic factors. No water was received from Silver Creek and no significant amounts of water flowed into Malheur Lake from the Silvies River. It is doubtful that more than 30 to 40 percent of the Blitzen Valley was adequately irrigated, and many of the seasonal brood ponds could not be maintained through the duck nesting season.

Flows from Diamond Valley streams had just begun to serve refuge lands when irrigation demands by upstream users virtually eliminated that source of water for the duration of the irrigation season. The Krumbo Valley was the only unit of the refuge that had adequate water supplies, due to storage in Krumbo Reservoir. Because of the relative dependability of irrigation water, Krumbo is being given priority in the expenditure of maintenance funds. Waterfowl production has declined drastically in this unit since the reservoir was developed by the refuge in the late 1950's. The yearling feed-lot operation and hay field on the south side of the Valley adjacent to the Krumbo Reservoir public access road was phased out, and the natural marsh area that formerly existed in this location was restored and is now being managed as a semi-permanent brood pond. A second seasonal brood pond was activated in the lower end of the Valley; several miles of supply ditches were cleaned; and several non-use areas were established in an initial effort to provide improved nesting habitat.

Similar non-use areas for both improved nesting cover and erosion control were set aside along the Blitzen River south of Diamond Lane, following retirement of the permittee involved. These are token efforts, but a start towards building needed flexibility into our vegetation management program. Annual waterfowl production at Malheur has declined from 100,000 to 150,000 birds produced, to 30,000 to 40,000 birds produced during the period 1942 through 1972. During this same period, AUM's of grazing (virtually all forage has been sold on an AUM basis until now) increased from about 30,000 to 125,000 annually. In addition, the number one duck nesting species of the 1940's .... the mallard .... has now become fourth behind the later nesting gadwall, redhead and cinnamon teal. While other factors may preclude our ever reaching former levels of production, the need for a change in the manner in which we are using grazing and haying as vegetative management tools is obvious.

The muskrat population "explosion" that began its upward climb during the winter of 1971/72 reached a peak during the current reporting period. The annual October muskrat house count on Malheur Lake revealed 7,482 houses and an approximate population of 37,400 muskrats. Commercial trappers, severely hampered by poor trapping conditions, did subsequently manage to remove 15,700. This was apparently not enough to maintain a thrifty population, as mortality and reduced production had reduced the population to about 4,600 animals by October, 1973.

While waterfowl production was only fair, two waterbird species experienced exceptional production in Malheur Lake. The white-faced ibis colony increased from 25 nests in 1972 to 55 nests this year. The Franklin's gull colony increased from 500 nests in 1972 to 1,000 nests in 1973. This resulted in the highest production ever recorded for these species, for reasons we are unable to explain.

Other major accomplishments during the year included completion of the center Buena Vista Pond complex dike, and the phase-out restoration of seven refuge and community garbage dump sites located on refuge lands. The eighth and last, used by the Malheur Environmental Field Station will be phased out by the end of calendar year 1973. A mobile radio system was installed in refuge vehicles and office.

An interpretive plan was completed by contract with ExhibiGraphics, Inc., of Salt Lake City, Utah. This should provide a firm basis for developing and implementing the refuge interpretive program.

An eagle rehabilitation pen was established to serve the Southeastern Oregon - Southwestern Idaho area. All nine goldens and the one bald eagle placed in the pen returned to the wild.

II. REFUGE ACCOMPLISHMENTS

The following output elements deviated plus or minus 25 percent between the planned units and those accomplished in FY 1973:

A. Interpretation

610 Wildlife Trails - Non-motor. The increase in accomplished units reflects the initiation of an 11-mile Canoe Trail in May, 1973. While this trail was planned for the reporting period, implementation and use was sooner than expected, and initial public response greater than expected.

611 Tour Routes. In 1969 we had a tour leaflet on a trial basis. The Activity Hours registered during that period were the basis for anticipated AH's for F.Y. 73. Our self-guided tour leaflet was not put in use in F.Y. 73 as it in the process of being revised.

613 Contact Stations. This increase reflects the use of the recently completed visitor use survey and more accurate data, rather than a true increase.

614 Exhibits and Demonstrations. An increase of 30 percent over the planned number of units reflects the increased annual use of the refuge in this category. Demand for this activity is increasing more rapidly than expected.

615 Other Programs. At present only two off-site exhibits have been in use, and the demand for off-site programs has not been as high as anticipated. In comparing 615 to 614, it appears that more groups are coming to the refuge rather than having refuge personel come to them.

B. Education

621 Teachers. Only one teacher Environmental Education short program was held during the fiscal year. It was hoped that those teachers receiving training in EE during F.Y. 1971 and 1972 would utilize the refuge for student training. This has not been the case.

C. Recreation - W/W Oriented

631 Hunting Resident Game. The decline of 41 percent of planned versus actual units reflects a decrease in the overall upland game bird population and, therefore, a reduced demand for hunting.

632 Fishing. In the original objective for fishing, an error in multiplication went unnoticed until the objectives were updated. This error was reflected in the planned outputs for F.Y. 73. Once this error was corrected, expected outputs for F.Y. 73 very nearly matched actual outputs for F.Y. 73.

D. Recreation - Non W/W Oriented

640 Camping. The -73% of accomplished units below those planned reflects the current trend at Malheur. We are in the process of phasing out camping entirely on the refuge in accord with new Bureau policy and previously approved objectives.

641 Picnicking. The reduction in picnicking is a response to two things: a more accurate method of measuring this output and a redefining of the output in our objectives.

E. Studies and Publications

650 Studies and Publications. Studies, although ongoing, were not completed within F.Y. 1973 and therefore could not be reported. Adjustments were made to the planned units for F.Y. 1974.

F. Environmental Preservation

661 Natural Areas. A proposal for designation of Stinking Lake as a Public Use Natural Area was not developed as planned, primarily because of our uncertainty as to whether Public Use Natural Area or Research Natural Area designation would be most appropriate. By the end of the period, we had finalized a Research Natural Area proposal for the area, with submission planned in F.Y. 1974.

G. Wildlife Maintenance

670 Threatened Species. Peregrine Falcon, White-faced Ibis, Ferruginous Hawk, American Osprey, Snowy Plover, and Burrowing Owl use days increased 54 percent in F.Y. 73 over planned use based on the 1965-1969 average (20,910 U.D. vs 13,600 U.D. planned). White-faced ibis made the difference, with recorded use nearly triple planned use — 18,000 U.D. recorded versus 6,400 U.D. planned. Increased ibis use was attributed to increased production and better feeding conditions present on the refuge, especially Malheur Lake, over previous years.

671 Special Recognition Species. Use days increased 110 percent in F.Y. 73 over planned use based on our 1965-1969 averages (8,534,370 U.D. recorded versus 4,065,800 U.D. planned). Generally, use by all species except raptors and doves accounted for the increase, with white pelicans, herons, bitterns and egrets, and shorebirds - especially dowitchers and gulls accounting for 85 percent (3,818,400 U.D.) of the increase. More use by these species was the result of higher production from ideal nesting conditions and improved feeding conditions as Malheur Lake waters receded to expose thousands of acres of mud flats. Raptor use was down 26 percent from planned use, with a general decline in numbers of all species. The 37 percent decline in dove use (68,650 U.D. recorded versus 110,200 U.D. planned) may be the result of a declining dove population in the northwest.

H. Wildlife Production

681 Species Transplanted. Planned goal of one animal transplanted was not met, as no suitable avenue for disposal could be found for the excess buck antelope in the exhibition pen.

682 Species Donated. The number of species donated was down 63 percent (37 donated versus 100 planned) because we were unable to make connections to ship 47 specimens to the National Museum by the end of the reporting period.

I. Economic Benefits

690 Depredations Prevented. The amount recorded is undoubtedly conservative, but we received limited livestock depredation complaints during the year (despite dire predictions by refuge permittees), and we feel the low figure is realistic.

692 Haying. The sudden increase in hay sales reflects our initial efforts to phase out winter feeding operations in some units by selling hay on a tonnage basis for feeding off refuge lands. Our objective is to leave more residual nesting cover.

694 Furbearers. The planned units figure is an annualized harvest figure that bears little relationship to the actual harvest in years when muskrats are trapped on Malheur Lake as they were this year. When our planning cycle begins to function as intended, we will do a better job of predicting actual harvest rates in our updated Annual Work Plan.

696 Concessions. We had not anticipated income in this output category, as we had assumed that transfer of ownership of the Frenchglen store and hotel would be completed prior to this period. Transfer was completed on both by the end of the period, and no money will be received from this source in the future.

J. Totals

Actual total benefits were decreased this year by slightly over 2,000,000 RBU's from the planned 114,841,400 down to 112,530,240.